

What is claimed is:

1. A light emitting element comprising:  
a base made of heat conductive material and having a heat radiation surface formed on a surface thereof;  
5 at least one wire plate made of an insulation material and secured to an upper surface of the base;  
exposing means for forming an exposed mounting area on the surface of the base;  
conductive patterns formed on the wire plate;  
10 a light emitting chip secured to the base at the mounting area; and  
connecting means for electrically connecting the light emitting chip to the conductive patterns.
2. The light emitting element according to claim  
15 1 wherein the heat radiation surface is provided on an underside of the base.
3. The light emitting element according to claim  
1 wherein the exposing means is a perforated hole formed in the wire plate.
- 20 4. The light emitting element according to claim 1 wherein the connecting means comprises a plurality of lead wires.
5. The light emitting element according to claim  
1 wherein the connecting means comprises a lead wire  
25 connected to the conductive pattern and the exposed mounting area of the base for connecting a terminal on an underside of the light emitting chip to an electric source.
6. The light emitting element according to claim

1 further comprising an encapsulating member for protecting the light emitting chip.

7. The light emitting element according to claim 1 further comprising cooling fins provided on the heat radiation surface of the base.

8. The light emitting element according to claim 1 further comprising heat radiation holes formed in one of sides of the base.

9. The light emitting element according to claim 5 further comprising a projection formed on an upper surface of the base, and a terminal portion provided on an upper surface of the projection so as to be electrically connected to the terminal on the underside of the light emitting chip.

10. A light emitting device comprising:  
a base made of heat conductive material and having a flat plate shape and a heat radiation surface formed on a surface thereof;

at least one wire plate made of an insulation material and secured to an upper surface of the base;

exposing means for forming an exposed mounting area on the surface of the base;

conductive patterns secured to the wire plate;

a light emitting chip secured to the base at the mounting area;

connecting means for electrically connecting the light emitting chip to the conductive patterns;

a print substrate having conductive patterns provided on an underside thereof and secured to the

conductive patterns on the wire plate so as to electrically connect both the conductive patterns.

11. The light emitting device according to claim 10 wherein print substrate has a hole for discharging the light emitted from the light emitting chip.

12. The light emitting device according to claim 10 further comprising a heat radiating member secured to an underside of the base.

13. A light emitting device comprising:  
10 a base made of heat conductive material and having a flat plate shape and a heat radiation surface formed on a surface thereof;

at least one wire plate made of an insulation material and secured to an upper surface of the base;

15 exposing means for forming an exposed mounting area on the surface of the base;

conductive patterns secured to the wire plate;

a light emitting chip secured to the base at the mounting area;

20 connecting means for electrically connecting the light emitting chip to the conductive patterns;

heat pipes projected from a side wall of the base; and

a heat radiation member secured to ends of the heat pipes.

25 14. A light emitting device having a plurality of heat emitting elements, each of the light emitting elements comprising:

a base made of heat conductive material and having a

flat plate shape and a heat radiation surface formed on a surface thereof;

at least one wire plate made of an insulation material and secured to an upper surface of the base;

5 exposing means for forming an exposed mounting area on the surface of the base;

conductive patterns secured to the wire plate;

a light emitting chip secured to the base at the mounting area;

10 connecting means for electrically connecting the light emitting chip to the conductive patterns; wherein

the light emitting device has a heat radiation member made of a flexible material, and the light emitting elements are supported on a surface of the heat radiation member.

15 15. A method for manufacturing light emitting elements comprising the steps of:

preparing a wire plate aggregation having a plurality of divisions, and preparing a base aggregation having a same size as the wire plate aggregation;

20 forming a mounting hole in each division of the wire plate aggregation, and providing a plurality of conductive patterns on each division;

securing the wire plate aggregation and the base aggregation with each other;

25 mounting a light emitting chip on the wire plate aggregation at the mounting hole;

electrically connecting the light emitting chip with the conductive patterns by wires;

encapsulating the light emitting chip and wires by  
encapsulating member; and

dicing the aggregation of the light emitting  
elements.

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